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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/914,487
Filing Date: August 27, 2001
Appellant(s): SHKOLNIK, SHLOMO

Paul Fenster (33,866)
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 7 October 2008 appealing from the Office action mailed 20 December 2007.

(1) Real Party in Interest

A statement identifying by name the real part in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,295,513	Thackston	9-2001
4,937,768	Carver et al.	6-1990

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 23-26, 30-31, 41-42, 51, 72-76, and 80-92 are rejected under 35 U.S.C. § 103(a) as being unpatentable over US Patent No. 6,295,513 to Thackston in view of US Patent No. 4,937,768 to Carver et al.

Regarding claim 23, Thackston teaches a method of forming a design index, comprising:

Providing a plurality of computerized design tools (FIG. 15), said tools being adapted for carrying out a design task of a particular system [*"This module may provide PDM management when cooperating with a CAD processing module that provides substantive CAD processing to a user relying on a working copy."* (column 20, lines 44-49); "CAD processing" throughout], at least some of which tools store information restricted to viewing by a respective limited group of workers [*"Stored design and analysis access permission data module 860 may comprise data assigned by the prime contractor determining which teams (or team members) may access the part design model, documents and EAS processing modules."* (column 15, lines 7-11)];

Which workers are assigned to a particular system or systems [*"In our sonobuoy example, there will be mechanical engineers, electrical engineers, RF engineers, acoustic specialists, reliability engineers, safety engineers, signal processing specialists, production engineers and so on."* (column 2, lines 9-13)];

Gathering, by a computer, from the plurality of computerized design tools, information on elements of different systems of the project [*"Stored baseline part design model data module 865 may contain the current approved version of the design referred to as the 'baseline.' ... A part design model may be created using the NICECAD CAD capability... In general, stored baseline part design model data module 865 may contain the part design models, such as 3D solid models, including attributes, for the projects in the NICECAD system 100."* (column 15, lines 28-45)];

Wherein the gathering includes retrieving from at least one of the computerized tools information on fewer than all the elements required for design of the system described by the tool [*"Stored working copy part design model data module 892 may be used by designers and analysts as a virtual "scratch pad" for storing part design models. For example, an EAS team member who checks out the current baseline part design model from module 865 may not be permitted to 'check in' that part design model."* (column 15, lines 46-55)];

Storing the information in the index (column 15, lines 28-45);

Opening the index for viewing by workers at least some of which are assigned to a different of systems from each other [*"Teams, such as EAS teams, may need access to all or part of a part design model in order to carry out the analysis for their specific discipline. They may*

need to access specifications or other documents to perform their task." (column 15, lines 15-27)];

Wherein storing the information in the index comprises storing only information which is authorized for viewing by workers assigned to any of the plurality of systems [*"Stored design and analysis access permission data module 860 allows an approval authority to assign access permissions to limit access to those portions of the part design module, those specifications (or portions thereof), and those EAS processing modules as appropriate. This serves configuration control by limiting access to only those who need it."* (column 15, lines 15-27)].

Thackston does not explicitly teach a "vehicle" example.

Carver teaches a method of designing a vehicle using CAD [*"A 3-D CAD program or programs, such as CATIA (IBM Corporation) or NCAD and NCAL (Northrop Computer Aided Design and Northrop Computer Aided Lofting, Northrop Corporation, Hawthorne, Calif.) would be suitable to define the master engineering definition of the aircraft 154 in 3-D graphics in the data model."* (column 22, lines 48-54)].

Carver and Thackston are analogous art because both are drawn to CAD.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of Applicants' invention to combine the teachings of Carver with Thackston as expressly motivated by Carver to precisely produce aircraft [*"This invention provides for new and improved methods and apparatus for precisely producing and assembling a multi-copmonent structure such as an aircraft."* (column 6, lines 62-64)] without the disadvantages of prior art methods (columns 1-6). The combination could replace Thackston's "sonobuoy" example with a

"vehicle," thus producing the claimed "vehicle design index," "different system of the vehicle," and "elements of the vehicle" as claimed.

Regarding claim 24, Carver teaches gathering the information comprises gathering information on the location of elements in the vehicle [*"The operator selects a portion of the total structure, as for instance the port side fuselage section 204 of FIG. 4."* (column 24, lines 1-2)].

Regarding claim 25, Carver teaches gathering interconnection information of the elements [*"The operator selects a portion of the total structure, as for instance the port side fuselage section 204 of FIG. 4."* (column 24, lines 1-2); *"A stressed skin construction for an aircraft relies upon the strength of the outer skin and attached components and not on strength imparted by internal structural members which might traverse or crisscross through the interior of the aircraft."* (column 1, lines 49-64)].

Regarding claim 26, Thackston teaches gathering references to documents describing the elements [*"In one embodiment, a design team member may associate a standard (e.g. MIL-STD-5556.8) with a particular graphical entity when creating a part design model. When viewing the design using a CAD tool (e.g., see FIG. 9, module 932) a fabricator team member may see the standard associated with a particular entity that may be 'clicked on' to link to the text of the standard."* (column 16, lines 44-51)].

Regarding claim 30, Carver teaches gathering information on elements of an aircraft [*"A 3-D CAD program or programs, such as CATIA (IBM Corporation) or NCAD and NCAL (Northrop Computer Aided Design and Northrop Computer Aided Lofting, Northrop Corporation, Hawthorne, Calif.) would be suitable to define the master engineering definition of the aircraft 154 in 3-D graphics in the data model."* (column 22, lines 48-54)].

Regarding claim 31, Thackston teaches gathering information periodically [*"Data backup and archiving processing module 1013 may comprise a module supporting periodic backing up and archiving of data (e.g., see FIG. 2, module 250)."* (column 19, lines 41-43)].

Regarding claim 41, Thackston teaches running a verification routine which finds design faults on the data contained within the database [*"Motion simulation module 1512 may use numerical simulation techniques to evaluate performance of a part design while in motion, such as to determine interference between components or with other objects in the operational environment, and to determine whether pressures and forces are excessive."* (column 26, lines 24-40)].

Regarding claim 42, Thackston teaches running a routine which checks for elements which are distanced from each other less than a minimal allowed distance [*"Motion simulation module 1512 may use numerical simulation techniques to evaluate performance of a part design while in motion, such as to determine interference between components or with other objects in*

the operational environment, and to determine whether pressures and forces are excessive." (column 26, lines 24-40)].

Regarding claim 51, Thackston teaches that the configuration management codes comprise three digits [*"In one embodiment, this module may contain the entire history of baseline designs, each of which is assigned a version number for tracking purposes (e.g., Design 1.00, 1.01, 1.02, etc.). The latest version number may be the current baseline design."* (column 15, lines 41-45)], and wherein at least some of the workers are associated with more than one of the worker codes (column 15, lines 8-27).

Regarding claim 72, Thackston teaches a method of providing information between workers designing a project, comprising:

Providing a working environment including a plurality of different departments, assigned to perform design tasks of respective different vehicle systems [*"In our sonobuoy example, there will be mechanical engineers, electrical engineers, RF engineers, acoustic specialists, reliability engineers, safety engineers, signal processing specialists, production engineers and so on."* (column 2, lines 9-13)];

Selecting a plurality, but fewer than 10% of the physical elements of each system of the vehicle to serve as major elements of the vehicle element [*"Stored baseline part design model data module 865 may contain the current approved version of the design referred to as the 'baseline.' ... A part design model may be created using the NICECAD CAD capability... In general, stored baseline part design model data module 865 may contain the part design models,*

such as 3D solid models, including attributes, for the projects in the NICECAD system 100." (column 15, lines 28-45)]; Omission of an element and its function is obvious is the function of the element is not desired – MPEP 2144.04 (II); Selecting "a plurality, but fewer than 10% of physical elements" merely omits to select additional elements, and does not retain the benefit of selecting additional elements];

Gathering, for each of a plurality of elements of the project, information regarding the element, including an indication of the relative assembly of the element [*"Stored baseline part design model data module 865 may contain the current approved version of the design referred to as the 'baseline.' ... A part design model may be created using the NICECAD CAD capability... In general, stored baseline part design model data module 865 may contain the part design models, such as 3D solid models, including attributes, for the projects in the NICECAD system 100."* (column 15, lines 28-45)];

And a reference to a worker in charge of the element [*"Stored design and analysis access permission data module 860 may comprise data assigned by the prime contractor determining which teams (or team members) may access the part design model, documents and EAS processing modules."* (column 15, lines 7-11)];

Storing the gathered information in a database having a records only for the major elements [*"Databases 210 may store information for a concurrent engineering development project, such as contracts data, engineering data, account data and other project related data..."* (column 11, lines 17-21); Thackston teaches storing information for the selected elements, as claimed. Selecting only the major elements is explained above.];

Searching the database, by a first worker assigned to one system or discipline of the vehicle, for information on one or more of the elements, and displaying information relating to the one or more elements; and sending an electronic message, by the first worker, to a second worker assigned to another system or discipline of the vehicle, based on information found in the search [*"Multimedia communications processing module 978 provides the multimedia communications capability of the system and, as depicted in FIG. 13..."* (column 24, lines 28-43); *"Quasi-real time graphics processing module 1306 is a module that may permit participants in an on-line communications session to view graphics, such as a 3D part design model or 2D section cuts, rotations, fly-throughs, zooms or pans in a substantially concurrent manner... This would allow, for example, one design team member to engage in the design effort with another remotely located design team member. This would allow, for example, a design team member to interact with a remotely located fabricator team member to view sectional cuts at the same time in order to discuss producibility issues."* (columns 24, line 66 – column 25, line 22)].

Thackston does not explicitly teach a "vehicle" example.

Carver teaches a method of designing a vehicle using CAD [*"A 3-D CAD program or programs, such as CATIA (IBM Corporation) or NCAD and NCAL (Northrop Computer Aided Design and Northrop Computer Aided Lofting, Northrop Corporation, Hawthorne, Calif.) would be suitable to define the master engineering definition of the aircraft 154 in 3-D graphics in the data model."* (column 22, lines 48-54)].

Carver and Thackston are analogous art because both are drawn to CAD.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of Applicants' invention to combine the teachings of Carver with Thackston as expressly motivated by Carver to precisely produce aircraft [*"This invention provides for new and improved methods and apparatus for precisely producing and assembling a multi-copmonent structure such as an aircraft."* (column 6, lines 62-64)] without the disadvantages of prior art methods (columns 1-6). The combination could replace Thackston's "sonobuoy" example with a "vehicle," thus producing "plurality of elements of the vehicle," "different systems or disciplines of the vehicle," and "elements of the vehicle" as claimed.

Regarding claim 73, Thackston teaches gathering at least three levels of a hierarchy of systems and sub-systems to which the major elements belong [*"Component interface analysis processing module 1520 may use numerical techniques to evaluate the interface between parts of a part design model, or between the part design model and external items."* (column 26, lines 47-50)].

Regarding claim 74, it would have been obvious over Thackston in view of Carver to select fewer than 1% of the elements. Omission of an element and its function is obvious is the function of the element is not desired – MPEP 2144.04 (II); Selecting "a plurality, but fewer than 1% of physical elements" merely omits selecting additional elements, and does not retain the benefit of selecting additional elements];

Regarding claim 75, Thackston teaches that the index is open for viewing by all workers working on the project, while changing the index is allowed only to workers responsible for changing the data of the index [*"For example, an EAS team member who checks out the current baseline part design model from module 865 may not be permitted to 'check in' that part design model. This is because it may be that only the prime contractor can authorize writing a baseline part design model to module 865."* (column 15, lines 48-53)].

Regarding claim 76, Thackston teaches gathering information on both electrical and mechanical elements (FIG. 15).

Regarding claim 80, Thackston teaches initiating communication between workers designing the project using different computerized tools, using information in the index [*"For example, if a design team and EAS team have a multimedia communications session using the NICECAD system to discuss certain design issues, a record may be stored reflecting the session."* (column 17, lines 34-47)].

Regarding claim 81, Thackston teaches gathering general information authorized for viewing by workers from a plurality of departments on elements having some details restricted to viewing by a limited group of workers [*"... the prime contractor may assign access permissions to part or all of the part design model, project specification, and the EAS processing modules."* (column 14, lines 55-57); *Stored design and analysis access permission data module 860 allows an approval authority to assign access permissions to limit access to those portions of the part*

design module, those specifications (or portions thereof), and those EAS processing modules as appropriate." (column 15, lines 7-27)].

Regarding claim 82, Thackston teaches a method comprising:

Providing computerized design tools for various systems of a project (FIG. 15);

Designing various systems of the project by workers using the computerized design tools [*"Teams, such as EAS teams, may need access to all or part of a part design model in order to carry out the analysis for their specific discipline. They may need to access specifications or other documents to perform their tasks. Likewise, those teams may need to access one or more EAS processing modules to carry out the analysis. Stored design and analysis access permission data module 860 allows an approval authority to assign access permissions to limit access to those portions of the part design module, those specifications (or portions thereof), and those EAS processing modules as appropriate."* (column 15, lines 8-27)].

Generating a database including information on the relationship between elements of the project from the various systems, but including information on fewer than all the elements of the project [*"Stored baseline part design model data module 865 may contain the current approved version of the design referred to as the 'baseline.' ... A part design model may be created using the NICECAD CAD capability... In general, stored baseline part design model data module 865 may contain the part design models, such as 3D solid models, including attributes, for the projects in the NICECAD system 100."* (column 15, lines 28-45)]; Omission of an element and its function is obvious is the function of the element is not desired – MPEP 2144.04 (II); Storing

"information on fewer than all the elements" merely omits to store additional information, and does not retain the benefit of storing additional information];

Said database being open to viewing by workers assigned to a plurality of said systems [*"Stored design and analysis access permission data module 860 may comprise data assigned by the prime contractor determining which teams (or team members) may access the part design model, documents and EAS processing modules."* (column 15, lines 8-11)];

Opening the database for viewing a worker assigned to a particular system of the project [*"Multimedia communications processing module 978 provides the multimedia communications capability of the system and, as depicted in FIG. 13..."* (column 24, lines 28-43); *"Quasi-real time graphics processing module 1306 is a module that may permit participants in an on-line communications session to view graphics, such as a 3D part design model or 2D section cuts, rotations, fly-throughs, zooms or pans in a substantially concurrent manner... This would allow, for example, one design team member to engage in the design effort with another remotely located design team member. This would allow, for example, a design team member to interact with a remotely located fabricator team member to view sectional cuts at the same time in order to discuss producibility issues."* (columns 24, line 66 – column 25, line 22)];

Determining from the database, by the worker, which elements of systems other than the system to which the worker is assigned, are directly affected by a possible change in an element of the project in the system to which the worker is assigned ["*This would allow, for example, a design team member to interact with a remotely located fabricator team member to view sectional cuts at the same time in order to discuss producibility issues."* (columns 24, line 66 – column 25, line 22)];

And performing at least one of displaying information relating to the one or more major elements and sending an electronic message to workers in charge of the elements determined to be affected by the change, to discuss the possible change [*"Multimedia communications processing module 978 provides the multimedia communications capability of the system and, as depicted in FIG. 13..."* (column 24, lines 28-43); *"Quasi-real time graphics processing module 1306 is a module that may permit participants in an on-line communications session to view graphics, such as a 3D part design model or 2D section cuts, rotations, fly-throughs, zooms or pans in a substantially concurrent manner... This would allow, for example, one design team member to engage in the design effort with another remotely located design team member. This would allow, for example, a design team member to interact with a remotely located fabricator team member to view sectional cuts at the same time in order to discuss producibility issues."* (columns 24, line 66 – column 25, line 22)].

Thackston does not explicitly teach a "vehicle" example.

Carver teaches a method of designing a vehicle using CAD [*"A 3-D CAD program or programs, such as CATIA (IBM Corporation) or NCAD and NCAL (Northrop Computer Aided Design and Northrop Computer Aided Lofting, Northrop Corporation, Hawthorne, Calif.) would be suitable to define the master engineering definition of the aircraft 154 in 3-D graphics in the data model."* (column 22, lines 48-54)].

Carver and Thackston are analogous art because both are drawn to CAD.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of Applicants' invention to combine the teachings of Carver with Thackston as expressly motivated by Carver to precisely produce aircraft [*"This invention provides for new and*

improved methods and apparatus for precisely producing and assembling a multi-copmonent structure such as an aircraft." (column 6, lines 62-64)] without the disadvantages of prior art methods (columns 1-6). The combination could replace Thackston's "sonobuoy" example with a "vehicle," thus producing "a different system of a vehicle," and "a vehicle design index" as claimed.

Regarding claim 83, it would have been obvious over Thackston in view of Carver to include less than 10% of the elements. Omission of an element and its function is obvious is the function of the element is not desired – MPEP 2144.04 (II); including "less than 10% of the elements of the vehicle" merely omits including additional elements, and does not retain the benefit of including additional elements];

Regarding claim 84, it would have been obvious over Thackston in view of Carver to generate a database including information insufficient to allow performing all the design tasks of the vehicle, which can be performed by the computerized tools [This claim apparently encompasses a database storing no information, or omitting some information. Please see MPEP 2144.04(II) as explained above in regard to claim 83.]

Regarding claim 85, Thackston teaches determining the identities of the contacted workers from the database [*"Quasi-real time graphics processing module 1306 is a module that may permit participants in an on-line communications session to view graphics, such as a 3D part design model or 2D section cuts, rotations, fly-throughs, zooms or pans in a substantially*

concurrent manner... This would allow, for example, one design team member to engage in the design effort with another remotely located design team member. This would allow, for example, a design team member to interact with a remotely located fabricator team member to view sectional cuts at the same time in order to discuss producibility issues." (columns 24, line 66 – column 25, line 22)].

Regarding claim 86, Thackston teaches a method of providing information between workers designing a project, comprising:

Providing a working environment including a plurality of different departments, assigned to perform design tasks of respective different vehicle systems or disciplines [*"In our sonobuoy example, there will be mechanical engineers, electrical engineers, RF engineers, acoustic specialists, reliability engineers, safety engineers, signal processing specialists, production engineers and so on."* (column 2, lines 9-13)];

Selecting fewer than 10% of the physical elements of each of the systems of the project to serve as major elements of the project [*"Stored baseline part design model data module 865 may contain the current approved version of the design referred to as the 'baseline.' ... A part design model may be created using the NICECAD CAD capability... In general, stored baseline part design model data module 865 may contain the part design models, such as 3D solid models, including attributes, for the projects in the NICECAD system 100."* (column 15, lines 28-45)]; Omission of an element and its function is obvious is the function of the element is not desired – MPEP 2144.04 (II); Selecting "fewer than 10% of physical elements" merely omits to select additional elements, and does not retain the benefit of selecting additional elements];

Gathering, for each of the major elements of the project, information regarding the element, including an indication of the relative assembly of the element [*"Stored baseline part design model data module 865 may contain the current approved version of the design referred to as the 'baseline.' ... A part design model may be created using the NICECAD CAD capability... In general, stored baseline part design model data module 865 may contain the part design models, such as 3D solid models, including attributes, for the projects in the NICECAD system 100."* (column 15, lines 28-45)];

And a reference to a worker in charge of the element [*"Stored design and analysis access permission data module 860 may comprise data assigned by the prime contractor determining which teams (or team members) may access the part design model, documents and EAS processing modules."* (column 15, lines 7-11)];

Storing the gathered information in a database having a records only for the major elements [*"Databases 210 may store information for a concurrent engineering development project, such as contracts data, engineering data, account data and other project related data..."* (column 11, lines 17-21); Thackston teaches storing information for the selected elements, as claimed. Selecting only the major elements is explained above.];

Managing in the database, for each selected element, an action item list including listings of at least one of actions related to the element which need to be performed or which were performed [*"In another embodiment, the working copy version numbers are maintained so that there is a complete history of all working copies of the part design model in the NICECAD system."* (column 16, lines 1-4)];

Opening the database for viewing by authorized workers of a plurality of departments, who are assigned to different systems of the vehicle or who utilize different engineering disciplines involved in the design of the project [*"Teams, such as EAS teams, may need access to all or part of a part design model in order to carry out the analysis for their specific discipline. They may need to access specifications or other documents to perform their task."* (column 15, lines 15-27)];

And contacting a worker in charge of the element based on information found in the search, and discussing with the contacted worker the proposed change [*"Multimedia communications processing module 978 provides the multimedia communications capability of the system and, as depicted in FIG. 13..."* (column 24, lines 28-43); *"Quasi-real time graphics processing module 1306 is a module that may permit participants in an on-line communications session to view graphics, such as a 3D part design model or 2D section cuts, rotations, fly-throughs, zooms or pans in a substantially concurrent manner... This would allow, for example, one design team member to engage in the design effort with another remotely located design team member. This would allow, for example, a design team member to interact with a remotely located fabricator team member to view sectional cuts at the same time in order to discuss producibility issues."* (columns 24, line 66 – column 25, line 22)].

Thackston does not explicitly teach a "vehicle" example.

Carver teaches a method of designing a vehicle using CAD [*"A 3-D CAD program or programs, such as CATIA (IBM Corporation) or NCAD and NCAL (Northrop Computer Aided Design and Northrop Computer Aided Lofting, Northrop Corporation, Hawthorne, Calif.) would*

be suitable to define the master engineering definition of the aircraft 154 in 3-D graphics in the data model." (column 22, lines 48-54)].

Carver and Thackston are analogous art because both are drawn to CAD.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of Applicants' invention to combine the teachings of Carver with Thackston as expressly motivated by Carver to precisely produce aircraft [*"This invention provides for new and improved methods and apparatus for precisely producing and assembling a multi-copmonent structure such as an aircraft."* (column 6, lines 62-64)] without the disadvantages of prior art methods (columns 1-6). The combination could replace Thackston's "sonobuoy" example with a "vehicle," thus producing "different vehicle systems or disciplines," "systems of the vehicle," "major elements of the vehicle," etc., as claimed.

Regarding claim 87, Thackston teaches a method of designing a project, comprising:

Providing a plurality of design tools (column 20, lines 44-49) each particular tool having a group of authorized users (column 15, lines 7-11) and each containing information regarding parts used in the project under design sufficient to design a portion of the aircraft or ship using the particular design tool (column 15, lines 45-65);

Providing a database containing information regarding fewer than all the parts needed for using any of the design tools and having information regarding parts used for a plurality of said design tools (column 15, lines 45-65) [Only approved or "base line" parts may be stored in the shared database];

Providing access to the database to authorized users of more than one design tool (column 15, lines 7-11); and

Utilizing the one design tool and information not contained in the one design tool but contained in the database to design or modify a part by an authorized user of the one design tool (column 15, lines 45-65).

Thackston does not explicitly teach a "vehicle" example.

Carver teaches a method of designing a vehicle using CAD [*"A 3-D CAD program or programs, such as CATIA (IBM Corporation) or NCAD and NCAL (Northrop Computer Aided Design and Northrop Computer Aided Lofting, Northrop Corporation, Hawthorne, Calif.) would be suitable to define the master engineering definition of the aircraft 154 in 3-D graphics in the data model."* (column 22, lines 48-54)].

Carver and Thackston are analogous art because both are drawn to CAD.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of Applicants' invention to combine the teachings of Carver with Thackston as expressly motivated by Carver to precisely produce aircraft [*"This invention provides for new and improved methods and apparatus for precisely producing and assembling a multi-component structure such as an aircraft."* (column 6, lines 62-64)] without the disadvantages of prior art methods (columns 1-6). The combination could replace Thackston's "sonobuoy" example with a "vehicle," thus producing the claimed "vehicle design index," "different system of the vehicle," and "elements of the vehicle" as claimed.

Regarding claim 88, Thackston teaches that the information gathered in the database is limited to data that is essential to each authorized user for determining possible problems connected with issues to which the worker is not assigned (column 15, lines 45-65; see also column 9, lines 11-24). The Examiner submits that due to the broad and ambiguous nature of the claim language (including the terms “essential” and "possible problems"), all of the information stored in the Thackston system appears to be the “limited” data recited by the claim. Applicants have chosen claim language that does not support any distinction between the claim and the prior art.

Regarding claim 89, Thackston teaches that workers assigned to said plurality of systems includes workers assigned to all the systems (column 15, lines 7-11).

Regarding claim 90, Thackston teaches that the method is sent automatically (column 17, lines 34-47).

Regarding claim 91, Thackston teaches that each of the parts have an identification code and wherein identical parts in different systems of the aircraft have different codes (column 15, lines 41-45); (column 15, line 66 – column 16, line 4).

Regarding claim 92, Thackston teaches a computer having stored therein a database (FIG. 2) and does not describe that changing worker assignments requires changing part numbers. The remainder of the claim language is directed to an environment in which the invention (“a

computer system") could be place. This language does not describe the computer system, and therefore does not describe the invention.

(10) Response to Argument

Appellants' seek a patent based on the concept of the claimed "design index" which stores some, but not all, of the available relevant information. By way of analogy, this is similar in concept to a traditional telephone book, which is an index of telephone numbers. The telephone company has a complete listing of every telephone number for billing and accounting purposes, however some of the telephone numbers are marked as "unlisted" telephone numbers. Telephone numbers are commonly "unlisted" to protect the privacy of the telephone service customer. These unlisted telephone numbers are not authorized for viewing by the public. To produce the index of telephone numbers, the telephone company may retrieve telephone numbers from their complete listing of every telephone number and insert them into their index of publicly viewable telephone numbers, but omit the unlisted telephone numbers. This process produces an index, the telephone book, which stores some, but not all, of the available relevant information.

The complete set of relevant information comprises all telephone numbers. The telephone book, or index, includes only the telephone numbers which are authorized for viewing by the public, and therefore does not include the "unlisted" telephone numbers.

Appellants' invention applies this very same concept to a "design index" for a computer-aided design (CAD) environment for a vehicle. The environment comprises a plurality of CAD

tools where each tool stores information about a plurality of elements for the vehicle. At least one CAD tool contains at least some information that is not authorized for viewing by persons outside a designated group ("restricted information"). This type of restriction is often used to provide security for the sensitive and proprietary CAD designs during the engineering process. The invention gathers information from the CAD tools and inserts the gathered information into an index, but does not insert the "restricted information" into the index. This produces an index, termed a "design index", which stores some, but not all of the available relevant information.

The complete set of relevant information comprises all the information on all of the CAD tools. The "design index" includes only the information which is authorized for viewing by the public, and therefore does not include the "restricted" information.

This concept is represented in the first independent claim as emphasized below:

> Claim 23. A method of forming **a vehicle design index**, comprising:
> **Providing a plurality of computerized design tools**, said tools being adapted for carrying out a design task of a particular system of a vehicle, **at least some of which tools store information restricted to viewing by a respective limited group of workers**, which workers are assigned to a particular system or systems of the vehicle;
> **Gathering**, by a computer, from the plurality of computerized design tools, **information on elements of different systems of the vehicle, wherein the gathering includes retrieving from at least one of the computerized tools information on fewer than all the elements of the vehicle required for design of the system described by the tool**;
> **Storing the gathered information in the index**; and
> Opening the index for viewing by worker at least some of which are assigned to a different systems of the vehicle from each other, wherein **storing the information in the index comprises storing only information which is authorized for viewing by workers assigned to any of the plurality of systems.**

The other independent claims represent similar concepts using various different terminology, such as "selecting fewer than 10% of the physical elements" (claim 86), "providing a database containing information regarding fewer than all the parts" (claim 87), etc.

The prior art of record, in particular the Thackston reference, teaches a comprehensive and fully integrated engineering design system, described at column 9, lines 10-17:

> NICECAD system 100 incorporates product data management (PDM), computer aided design (CAD), engineering analysis and simulation (EAS), multimedia communications and electronic commerce (EC) so that the entire project, including its engineering and business components, may be carried out in a virtual, collaborative and secure environment.

Thackston further teaches that the publicly accessible design index does not include all of the information from some of the design tools because that information is not authorized, described at column 15, line 28 – column 16, line 4:

> Stored baseline part design model data module 865 may contain the current approved version of the design referred to as the "baseline." [...] Stored working copy part design model data module 892 may be used by designers and analysts as a virtual 'scratch pad' for storing part design models. For example, an EAS team member who checks out the current baseline part design model from module 865 may not be permitted to 'check in' that part design model. This is because it may be that only the prime contractor can authorize writing a baseline part design model to module 865. This provides configuration control and protects the integrity of the current baseline part design model.

Thus Thackston teaches that an EAS team member may retrieve ("check out") a part model from the index, modify it by working with a stored local copy (in a "virtual scratch pad"), and that the modified stored local copy is not authorized for re-inclusion in the index. Thus, Thackston teaches that the index comprises some, but not all, of the relevant information stored with the CAD design tools. Thackston clearly teaches that this is advantageous "to protect the

integrity," i.e. to provide security for, the part design model. The claimed "design index" is neither novel nor non-obvious over the prior art of record.

Response to Arguments, claim 23

On page 14 of the Appeal Brief, Appellants argue that:

> First, there is no teaching in Thackston of any index being present in system 200. In fact, as indicated in col. 14, line 52 to col. 14, line 3, the listings and control of check-in and check out are performed in the individual databases. Applicant submits that the only indices in Thackston are in modules 210 and that module 200 store no information on the individual elements.

The Examiner respectfully traverses this argument as follows.

Thackston teaches a comprehensive and fully integrated engineering design system, described at column 9, lines 10-17:

> NICECAD system 100 incorporates product data management (PDM), computer aided design (CAD), engineering analysis and simulation (EAS), multimedia communications and electronic commerce (EC) so that the entire project, including its engineering and business components, may be carried out in a virtual, collaborative and secure environment.

Thackston teaches a data storage system that corresponds to the claimed “index”, described at column 11, lines 12-24:

> Databases 210 depict the storage media that may be employed to store data maintained by the NICECAD system. [...] Databases 210 may store information for a concurrent engineering development project, such as contracts data, engineering data, account data and other project related data (further discussed below in conjunction with FIGS. 3-8

Therefore, in contradiction to Appellants’ argument, Thackston teaches an index present in the disclosed system.

On page 14 of the Appeal Brief, Appellants argue that:

> Second, even assuming arguendo that system 200 does have an index and does store such an index, there is no teaching or rational for this index being incomplete in the sense defined in [the language of claim 23].

The Examiner respectfully traverses this argument as follows.

Thackston not only teaches, but explicitly provides the rational for the incompleteness of the central design index, by teaching at column 15, line 28 - column 16, line 4:

> Stored baseline part design model data module 865 may contain the current approved version of the design referred to as the "baseline." [...] Stored working copy part design model data module 892 may be used by designers and analysts as a virtual 'scratch pad' for storing part design models. For example, an EAS team member who checks out the current baseline part design model from module 865 may not be permitted to 'check in' that part design model. This is because it may be that only the prime contractor can authorize writing a baseline part design model to module 865. This provides configuration control and protects the integrity of the current baseline part design model.

Thus Thackston teaches that an EAS team member may retrieve ("check out") a part model from the index, modify it by working with a stored local copy (in a "virtual scratch pad"), and that the modified stored local copy is not authorized for re-inclusion in the index. The design index is therefore "incomplete" in the sense defined in claim 23. Thackston expressly provides a rationale for that incompleteness, such as to "protect the integrity" of the part design model.

> On page 14 of the Appeal Brief, Appellants argue that:
>
> Third, applicant submits that the databases 210 have information only on the particular design tool service by database 210. [sic]

The Examiner respectfully traverses this argument as follows.

It is unclear in this argument precisely which claim limitations allegedly define over the prior art. However, Thackston clearly teaches that the databases store information on more than a particular design tool by teaching at column 9, lines 10-17:

> NICECAD system 100 incorporates product data management (PDM), computer aided design (CAD), engineering analysis and simulation (EAS), multimedia communications and electronic commerce (EC) so that the entire project, including its engineering and business components, may be carried out in a virtual, collaborative and secure environment.

Therefore Thackston teaches a database 210 that has more information than what is provided or accessed by any single particular design tool.

On page 14 of the Appeal Brief, Appellants further argue that:

> In the event that the Examiner attempts to identify the index and the gathering with the entire system including a plurality of databases 210 then the rejection fails on the basis that this "database" include complete information on the entire design of all the elements and not as claimed.

The Examiner respectfully traverses this argument as follows.

Thackston clearly teaches a plurality of databases (column 9, lines 10-24) and clearly teaches that some information ("scratch pad" part models) is excluded from the index (column 15, line 28 – column 16, line 4). The teachings of Thackston therefore contradict Appellants' characterization of the reference, regardless of any opinion held by the Examiner.

On page 15 of the Appeal Brief, Appellants argue that:

> Thackston fails to teach at least one additional (and related) element of claim 23 as amended after final, namely: "wherein storing the information in the index comprises storing only information which is authorized for viewing by workers assigned to any of the plurality of systems." The Examiner cites from Thackston, col. 15, lines 15-27 as apparently teaching this element: "Stored design and analysis access permission data module 860 allows an approval authority to assign access permission <u>to limit access</u> to those portions of the part design module, those specifications (or portions thereof), and those EAS processing modules as appropriate. This serves configuration control <u>by limiting access</u> to only those who need it." (Emphasis added by Appellants).

> Thus, according to this quotation of Thackston, it is taught to limit *access* to certain information in the database. However, Thackston does not teach nor suggest storing only information which is authorized for viewing by workers assigned to any of the plurality of systems as recited in claim 23. On the contrary, by providing methods to limit access to some information, it is evident that Thackston's intention is to store all information in the database, including information which is not authorized to be viewed by workers of other departments. (Emphasis added by Appellants)

The Examiner respectfully traverses this argument as follows.

Thackston plainly teaches a system that provides access to only those who need it. Appellants claim to have invented a system that provides access to only those who need it. Thackston teaches a system where restricted information is made unavailable (through access permissions). Appellants claim to have invented a system where restricted information is made unavailable (through omission of the information). Additionally, Thackston clearly teaches the omission of certain information (column 15, line 28 – column 16, line 4).

A person of ordinary skill in the art would plainly recognize that merely omitting information is a simpler solution than providing access restrictions. If a person implementing the system of Thackston has a relatively simple design project with only a limited amount of restricted information, it would be immediately obvious to a person of ordinary skill in the art of computer-aided design tools to simply omit the restricted information from the database. The prior art is replete with examples of this reasoning, such as the telephone book example described above.

Response to Arguments, claim 72

On page 16 of the Appeal Brief, Appellants argue that:

> The Examiner rejected claim 72 based on MPEP 2144 (II)A according to which omission of an element and its function is obvious if the function of the element is not desired and

> states that "selecting a plurality, but fewer than 10% of the physical elements" merely omits to select additional elements and does not retain the benefit of selecting additional elements.
>
> This argument is continued on page 17 of the Appeal Brief, where Appellants argue that:
>
> In a very real sense, omission of these elements to the extent that only 10% (claims 72, 83, and 86) or 1% (claim 74) of the total elements is found in the database, provides a new database, one which is more portable and easier to use in many ways. This new database not only does not reduce the functionality of the system but actually increases the functionality, which is a further indication of patentability.
>
> Applicant submits that the reduction in the scope of the universally available database is a patentable feature since it does not reduce the functionality of the design system as a whole, and actually enhances it. Alternatively, applicant submits that the new database is so different from the database of Thackston that it can not be considered a mere modification of it.

The Examiner respectfully traverses this argument as follows.

The Examiner refers back to the telephone book analogy presented above.

It would be obvious to a person of ordinary skill that 10% of a phone book does not provide a phone book that 1) has the same functionality as a complete phone book, and 2) has enhanced functionality; or 3) is so different from a complete phone book that it defines a patentable invention. A phone book that includes only 10% of the available telephone numbers is merely an incomplete telephone book.

Turning to the claimed invention, Appellants have merely claimed storing 10% of a complete database. This database clearly and factually lacks the functionality of the complete database because it does not contain information on 90% of the parts. Appellants have not removed elements from the prior art and discovered *new advantages*. Instead, Appellants have removed elements from the prior art database and discovered a smaller, incomplete database. As

clearly and plainly instructed by MPEP 2144, the Examiner finds this invention obvious over the prior art.

On page 16 of the Appeal Brief, Appellants argue that:

> As previously argued by applicants on October 1, 2007, the entire concept of Thackston is that information on all parts should be stored in the database since they are required for the designers of the system. Accordingly, it would not have been obvious to store only information on fewer than 10% of the elements.

The Examiner respectfully traverses this argument as follows.

Contrary to Appellants' argument, Thackston clearly teaches that not all information is made available in the index (column 15, line 28 – column 16, line 4). Thackston teaches storing fewer than 10% of the elements, because on a very busy day of design work, during which numerous copies of part models are checked out and modified in numerous "scratch pads," fewer than 10% of the elements may be stored in the index. This limitation is merely a question of relative proportions which, in the context of the field of invention, do not define a novel or non-obvious invention as argued by the Examiner elsewhere.

On page 17 of the Appeal Brief, Appellants argue that:

> [In Thackston, in] order to protect secret information, authorization is requested to view some of the information. However, Thackston system would not operate if no information on all of the elements, and certainly not of fewer than 10% of the elements, would have been stored in the database. Since all of this information is required to designers of the system. Thackston does not provide any other database where information on elements can be found. [sic]

The Examiner respectfully traverses this argument as follows.

Contrary to Appellants' conclusion that Thackston "would not operate" if the database were limited to containing information on, for example, fewer than 10% of the elements, a person of ordinary skill in the art would immediately recognize that in such a circumstance, the Thackston system would operate as described by Thackston and not as alleged by Appellants.

For example, in the initial stages of designing a product, a great number of the parts required for the complete product might not yet be designed. In this case, the database would have 10% of fewer of the parts required for the project. If a person searched the database for one of these 10% or fewer parts, the Thackston system would operate as described by the Thackston reference. However, if a person searched the database for one of the 90% or more of the parts which are not yet designed, the Thackston system would indicate that no such part can be found in the database.

The reason for this behavior in the Thackston system is because an incomplete database is merely an incomplete database and is not a *new invention* with previously unappreciated features, functions, and abilities. Thus, contrary to Appellants' allegation, the Thackston system would operate if fewer than all, or fewer than 10%, or fewer than 1% of the elements were stored in the database.

Further, Thackston teaches that not all of the elements are stored in the index (column 15, line 28 - column 16, line 4).

On page 17 of the Appeal Brief, Appellants argue that:

> Applicant submits that the function of the design systems of both Thackston and the present invention is to allow design workers of a given system access to the elements of the vehicle outside their own system that they may need to know about in order to be able to design their own system properly. If the Examiner's analysis is correct that elements

> have been left out of Thackston's system to meet the requirements of the present claim 72, then since the present claimed system allows the designers to perform their design, the elements have been omitted while retaining the function. This is a true indicia of patentability.

The Examiner respectfully traverses this argument as follows.

The Examiner is unable to address the sequence of Appellants' rationale.

The Examiner submits that omitting information from a database results in a database that lacks the omitted information. The complete database includes a function wherein any of the data can be retrieved. The incomplete database lacks this function, because the omitted information does not exist in the database for retrieval. Therefore, Appellants have not invented a database with reduced information storage yet enhanced functionality, nor have Appellants shown "a true indicia of patentability." Rather, Appellants are attempting to secure a patent for discovering an incomplete database that lacks the functionality of a complete database. This incomplete database is obvious over the prior art as argued by the Examiner throughout the Final Rejection and this Examiner's Answer.

Response to Arguments, claims 82, 86, and 87

In response to the rejection of claims 82, 86, and 87, Appellants reiterate arguments that have been addressed above and found unpersuasive.

Response to Arguments, claim 92

On page 19 of the Appeal Brief, Appellants argue that:

> The Examiner rejected claim 92 on the basis that Thackston teaches a computer having stored therein a database and does not describe that changing working assignments requires changing part numbers. The Examiner did not relate to the remainder of the

> claim language since it is directed to an environment in which the invention could be placed and does not described the invention.
>
> [...] The Examiner has ignored the remainder of the claim language which defines the claimed system and has therefore not provided a prima facie case of obviousness against claim 92.
>
> In particular, the claim further requires that the system includes a second database that associates each of the worker codes with one or more workers responsible for design, such that changing worker assignments does not require changes in the part numbers. No such second database is taught or suggested by Thackston. Thackston teaches assigning version numbers to design models, see for example Col. 15, lines 41-45. However, applicant could not find any reference in Thackston to assigning worker codes to workers responsible for designs and certainly not having a second database associated each of the worker codes with one or more workers responsible for the design, such that changing worker assignments does not require changes in the part numbers.

The Examiner respectfully traverses this argument as follows.

It has long been established that inventors may describe their invention as they choose. Here, Appellants have chosen to describe the invention according to its surroundings ["... *in a working environment including a plurality of different departments, assigned to perform design tasks of respective different aircraft systems in which at least some parts of the aircraft are assigned a worker code that indicates worker responsibility for design of that part*"] in conjunction with a negative limitation [*"...and also having a database that associates each of the worker codes with one or more workers responsible for the design,* ***such that changing worker assignments does not require changes in the part numbers.***"].

The Examiner is unaware of any relevant instructions in the MPEP for finding "a computer system" novel or non-obvious over the prior art based upon its surroundings. The Examiner submits that any such claim language simply fails to describe what Appellants have invented, and therefore cannot be the determining factor in patentability. Awarding a patent for Appellants' description of something they have not invented is clearly improper.

Further, Thackston discloses a plurality of databases (column 9, lines 10-24) and associating worker codes with one or more workers responsible for the design (column 15, lines 7-27, describing the "stored design and analysis access permission data module 860"). There is no disclosure in Thackston that "changing workker assignments requires changes in the part numbers." Therefore any analysis based upon the facts presented in the Thackston reference must necessarily conclude that Thackston teaches Appellants' claim language.

Response to Arguments, Dependent Claims

On page 20 of the Appeal Brief, Appellants argue that:

> Claim 51 recites "wherein at least some of the workers are associated with more than one of the worker codes." The Examiner rejected claim 51 since Thackston teaches that the configuration management codes comprises three digits. Applicant respectfully traverses the rejection and submits that the Examiner has not presented a prima facie case of obviousness against claim 51 since the configuration management codes are assigned to design models and not to workers, see Col. 15, lines 41-45. Furthermore, a three digit codes does not meet the recitation of "associated with more than one of the worker codes". Applicant submits that Thackston does not teach nor suggest associating more than one worker code to a worker and claim 51 is patentable over the prior art.

The Examiner respectfully traverses this argument as follows.

Thackston teaches providing access codes to "teams" (column 15, lines 8-27). It would have been obvious to a person of ordinary skill in the art that a person might belong to more than one team, and thus have more than one responsibility. Appellants have not invented "workers who have more than responsibility." Because it would have been known that workers can have more than one responsibility, the teachings of Thackston render it obvious to assign more than one worker code to a worker, and store those codes in a database.

On page 20 of the Appeal Brief, Appellants argue that:

> Claim 74 recites "wherein selecting the major elements comprises selecting fewer than 1% of the physical elements of the vehicle." Applicant submits that is not taught nor suggested by Thackston.

The Examiner respectfully traverses this argument as follows.

Thackston teaches storing fewer than 1% of the elements, because on a very busy day of design work, during which numerous copies of part models are checked out and modified in numerous "scratch pads," fewer than 10% of the elements may be stored in the index. This limitation is merely a question of relative proportions which, in the context of the field of invention, do not define a novel or non-obvious invention as argued by the Examiner elsewhere.

On page 20 of the Appeal Brief, Appellants argue that:

> Claim 80 recites "initiating communication between workers designing the vehicle using different computerized tools, using information in the index." This is not taught nor suggested by Thackston. The Examiner cited from col. 17, lines 34-47 as apparently teaching this recitation: "For example, if a design team and EAS team have a multimedia communications session using the NICECAD system to discuss certain design issues, a record may be stored reflecting the session." Applicant respectfully submits that the Examiner has not provided a prima facie case of obviousness against claim 80 since he did not show where the claimed feature is found in the prior art.

The Examiner respectfully traverses this argument as follows.

Thackston, column 17, lines 34-47 teaches:

"Stored quasi-real time multimedia communications sessions data module 890 may comprise records of data of multimedia communications sessions [...] between team members in a concurrent engineering development project."

On pages 20-21 of the Appeal Brief, Appellants argue that:

> Claim 81 recites "wherein gathering information on elements of the vehicle comprises gathering general information authorized for viewing by workers from a plurality of departments on elements having some details restricted to viewing by a limited group of workers." The Examiner cites against claim 81 from Cols. 14 and 15 of Thackston, relating to access permissions to information. Applicant respectfully disagrees with the Examiner and submits that the Examiner has not provided a prima facie case of obviousness since the Examiner did not show where the claimed features are found in the art.

The Examiner respectfully traverses this argument as follows.

Thackston, column 15, lines 7-27 teaches:

"Stored design and analysis access permission data module 860 allows an approval authority to assign access permissions to limit access to those portions of the part design module, those specifications (or portions thereof), and those EAS processing modules as appropriate."

Thackston clearly teaches that the elements have some details restricted to viewing by a limited group of workers as claimed by Appellants. Thackston clearly teaches that general information authorized for viewing by workers from a plurality of departments is gathered (shown throughout the Final Rejection and the Examiner's Answer. For one such example, see Thackston, column 15, line 46 – column 16, line 4, describing a "baseline part design model" that is available to a plurality of workers from different departments.)

On page 21 of the Appeal Brief, Appellants reiterate arguments referring to claim 83 and a "fewer than 10% of the elements" limitation. This argument has been traversed above in relation to claim 74.

On page 21 of the Appeal Brief, Appellants argue that:

> Claim 84 recites "wherein generating the database comprises generating a database including information insufficient to allow performing all the design tasks for the vehicle, which can be performed by the computerized tools." This is not taught nor suggested by Thackston.

The Examiner respectfully traverses this argument as follows.

Thackston explicitly teaches that information required for design tasks of the vehicle is excluded from a design index by teaching that a "working copy" of a part model, which specifically refers to data required by the computerized tools for performing design tasks, is not authorized for "checking in" to the design index (column 15, line 46 – column 16, line 4).

On page 22 of the Appeal Brief, Appellants argue that:

> Claim 88 recites "wherein the information gathered in the database is limited to data that is essential to each authorized user for determining possible problems connected with issues to which the worker is not assigned. [Appellant submits that Thackston does not teach this limitation.]

The Examiner respectfully traverses this argument as follows.

Thackston teaches that the information gathered in the database is limited to data that is essential to each authorized user for determining possible problems connected with issues to which the worker is not assigned (column 15, lines 45-65; see also column 9, lines 11-24). The Examiner submits that due to the broad and ambiguous nature of the claim language (including the terms "essential" and "possible problems"), all of the information stored in the Thackston system appears to be the "limited" data recited by the claim. Applicants have chosen claim language that does not support any distinction between the claim and the prior art.

On page 22 of the Appeal Brief, Appellants argue that:

> Claim 89 recites "wherein workers assigned to said plurality of systems includes workers assigned to all the systems." [...] Applicants submit that there is no hint in the cited section to store only information that is authorized to be viewed by workers assigned to all of the systems.

The Examiner respectfully traverses this argument as follows.

Thackston, column 15, lines 8-27 teaches:

"Stored design and analysis access permission data module 860 may comprise data assigned by the prime contractor determining which teams (or team members) may access the part design model, documents and EAS processing modules."

Thackston clearly teaches a "prime contractor" who plays a supervisory role over the employees in the departments and has control over their permissions to access the NICECAD system. By any reasonable understanding of a manufacturing environment, Thackston's "prime contractor" would be understood to be "assigned to all of the systems" because she clearly has a responsibility over all of the teams by controlling all of the teams' access permissions. Further, Appellants have not invented "workers assigned to all the systems" of a vehicle design project. Thackston renders the claimed features obvious.

Conclusion

Appellants argue that the Thackston reference fails to disclose a design index storing some, but not all of the available relevant information. This feature is represented as storing only "information that is authorized for viewing" by all workers, storing less than 10% of the elements, storing less than 1% of the elements, storing only the major elements, etc. Appellants claim language is broad and ambiguous.

Thackston plainly teaches a design index storing some, but not all of the available relevant information. Thackston teaches that the stored information is authorized for viewing by

other workers, whereas the excluded information is not authorized for viewing by other workers. Thackston in view of Carver renders the claimed invention obvious.

Appellants' arguments have been fully considered by the Examiner but have been found unpersuasive.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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Examiner, Art Unit 2123

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